of the Section of Zoölogy of the Michigan Academy of Science in the Museum Lecture Room, Ann Arbor, on Friday, March 30, 1906. C. Adams, vice-president of the section of zoology, presided. The following ornithological papers were presented: 'Bird Dissemination of Juniperus,' Frank J. Phillips; 'An Ecological Study of the Birds of Ypsilanti Bayou,' Max M. Peet; 'Twenty-five years of Bird Migration at Ann Arbor,' Norman A. Wood; 'Notes on the Birds of the Michigan Forest Reserve,' E. H. Frothingham; 'The Bird Life of Ann Arbor, Michigan, and Vicinity' (by title), Norman A. Wood; 'A Topographical Study of the Birds of the "Overflow" at Ann Arbor, Mich., R. A. Brown; 'An Ecological Survey of Isle Royal, Lake Superior,' Chas. C. Adams; 'The Ecological Distribution of the Birds on Isle Royal,' Otto McCreary; 'The Fall Migration of Birds on Isle Royal' (by title), Max M. Peet. Professor Walter B. Barrows, president of the Club and of the Academy, gave his presidental address before the Academy on 'Facts and Fancies in Bird Migration' in the lecture room of the physical laboratory on Thursday evening.

A business meeting was held in the afternoon in the office of the curator of the University Museum. The officers for 1906–7 were elected as follows: President, Prof. Walter B. Barrows, Agricultural College; Vice-Presidents, J. Claire Wood, Detroit, Edward Arnold, Battle Creek, Norman A. Wood, Ann Arbor; Secretary, Dr. Alexander W. Blain, Jr., Detroit; Treasurer, Frederick C. Hubel, Detroit; Editor of 'Bulletin,' Walter B. Barrows; Associate Editors, Dr. Wm. H. Dunham, Kalkaska, Dr. R. A. Brown, Kalamazoo.— A. W. Blain, Jr., Sec'y.

RECENT LITERATURE.

Buturlin's 'The Breeding-grounds of the Rosy Gull.'—The breeding-grounds of the Rosy Gull (Rhodostethia rosea) long eluded discovery, but Dr. Buturlin has now found one of its summer haunts in the delta of the Kolymá River, on the Arctic coast of eastern Siberia. Here (latitude 69° N., long. 160° E.) in June, 1905, he found small colonies of these birds breeding and secured a good series of skins of both adults and downy young, and 36 eggs. The first Rosy Gulls were seen May 30 and 31; "they had evidently just finished their migration and were tired after their exertions." In a few hours they had recovered from their fatigue. They were quite easy of approach, and Dr. Buturlin was able

 $^{^{1}\,\}mathrm{The}$ Breeding-grounds of the Rosy Gull. By S. A. Buturlin. Ibis, 1906, pp. 131–139, 333–337.

to observe them and procure specimens whenever he wished. Later he "found the Rosy Gull nesting in little colonies of from two or three to ten or fifteen pairs, in company with the Black-capped Tern of the delta." From June 3 onward the gulls became scarce on the river, and were dispersed over the delta, "though the snow was still deep in the bushy portions and the ice had only melted for a distance of a fathom or two from the banks." On the 13th of June several clutches of eggs, all somewhat incubated, were taken. The last four clutches, taken June 26, "were so much incubated that the embryros were covered with down, and would have been hatched in a very few days."

"One of the colonies was on a piece of wet tundra near two lakes, a square kilometer in extent, covered with a labyrinth of pools of snowwater from two to six or even ten inches deep, but practicable in wadingboots, thanks to its floor of everlasting ice beneath the underlying mud. Between these pools, which were from fifteen to fifty feet in diameter, were pieces of very wet ground covered with Carices, damp mossy spots, and even tiny patches of comparatively dry bog covered with lichens or Betula nana. In this colony I found ten nests of Rodostethia, placed, among those of the Tern, on little mossy swamps almost bare of grass, evidently because the more grassy places were too wet and unsafe. But in the remaining colonies the state of affairs was otherwise; there the Tern nested on the moss - sometimes making no nest at all - and laid its one or two eggs much nearer to the dry parts of the little islands, which were perhaps a hundred yards long and from ten to twenty yards wide, while the Rosy Gulls made their nests on wet grassy spots or bogs much nearer to the water, and these nests rose from four to ten inches - generally from five to eight inches — above the surface. The hollow formed in the grass (dead grass of course, as green grass is hardly ever seen by the 20th of June) is about six or seven inches in diameter, but the nest proper is a hollow cup only about four or four and a half inches in diameter. It is composed of dry grass and Carices, sometimes with the addition of a few dry Betula or Salix leaves, while I once saw one made of white reindeer-moss." The number of eggs is nearly always three, but sometimes only two, while four are said to be often found. Downy young were taken July 6 and 7.

Dr. Buturlin gives a description of the eggs and of the downy young, and of the habits of the birds while at their breeding-grounds. In regard to their breeding range along this part of the Arctic coast, he states that "all the lowlands of the northern half of the Kolymá district (bordered by the rivers Chaun and Alazeya, the Arctic Ocean and the Stanovoi Mountains) are inhabited by Rodostethia rosea, and this area covers at least 160,000 square kilometers. In the eastern parts of the Verkhoyansk district it probably breeds up to the Indigirka River."

The account of this important discovery was written in the field, in two parts, dated respectively June 30 and July 10, 1905.— J. A. A.